USIB-D-71.6/4
30 January 1970

UNITED STATES INTELLIGENCE BOARD

MEMORANDUM FOR THE UNITED STATES INTELLIGENCE BOARD

SUBJECT   :   Intelligence Information Handling Committee
Annual Report (AR-2) Update

REFERENCES :   a. USIB-D-71.6/3, 21 August 1969 and
Memorandum for Holders thereof
dated 16 January 1970
b. USIB-D-71.1/3, 22 October 1968

1. The enclosed memorandum on this subject from the Chairman of the Information Handling Committee (IHC) and its attached report submits for information and noting by USIB an updating of the Second Annaul Report of the IHC which was circulated by reference a.

2. A Memorandum for the President from the Director of Central Intelligence on NSAM 368 (Intelligence Information Handling System) which was submitted on 22 October 1968 (see reference b.) contains, among other things, a proposal that the "IHC Annual Report (which will be updated by a summary progress report at the end of the calendar year) be accepted in the future as a normal means of reporting on community information handling activity". Accordingly, in addition to the regular dissemination to the President's Foreign Intelligence Advisory Board, General Robert Taylor plans to forward a copy of the subject report to Dr. Kissinger after it has been noted by the USIB.

3. It is not now planned to schedule this report on an agenda for Board discussion unless specifically requested by a Board Member prior to the close of business 10 February 1970. In the absence of such a request, it will be considered for record purposes that the USIB noted the subject report on that date.

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JAMES S. LAY, JR.
Executive Secretary

Enclosure

GROUP 1
Excluded from automatic
downgrading and
declassification

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Enclosure
USIB-D-71.6/4

IHC-AR-2/1
30 January 1970

UNITED STATES INTELLIGENCE BOARD

INTELLIGENCE INFORMATION HANDLING COMMITTEE

MEMORANDUM FOR: United States Intelligence Board

SUBJECT: Intelligence Information Handling Committee Annual Report (AR-2) Update

REFERENCES: (a) USIB-D-71.6/3, 21 August 1969

(b) USIB-D-71.1/3, 22 October 1968

1. In accordance with the proposal in Reference (b) that an update of the IHC Annual Report be provided at the end of the calendar year, the attached report is hereby submitted. The report updates information handling activities and projects reported in the referenced documents.

2. Full and detailed reporting on a number of efforts mentioned for the first time will be included in the Third Annual Report to be submitted at the end of FY-70.

Robert Taylor
Chairman

Attachment

GROUP I
Excluded from automatic
downgrading and
declassification.

CHAPTER I

INTRODUCTION

A. General.

This is the semiannual update of the Second Annual Report (AR-2) of the USIB Intelligence Information Handling Committee (IHC). As mentioned in the Introduction to the Annual Report, it is intended as the normal means of reporting on intelligence community information handling activity. The structure of the update, with the exception of Chapter II, is the same as that of the AR-2, that is, by similar activity, rather than by organization, to show the relationship of these activities to the Objectives for Information Handling, adopted by USIB on 4 April 1968 (USIB-D-71.2/1). All lettered and numbered items contained in Chapters III through XI of AR-2 are listed in this update. Under the guidance for contributions to this report only significant progress was to be reported. Thus, items with the notation "No Reported Change" may have made some progress during the reporting period but did not meet the criteria for inclusion in this report. Items carrying the notation "Not Previously Reported" did not appear in AR-2.

B. Membership of the Intelligence Information Handling Committee.

On 1 January 1970, membership of the Committee consisted of:

Chairman - Maj. Gen. (USAF Ret.) Robert Taylor, AD/DCI/NIPE
Secretary - [   ] CIA

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Organization	Representative
State	- Dr. Bruce H. Allen
	Mr. Charles R. Stein, Alternate
NSA	- [ ]
	No Alternate
CIA	- [ ]
	Alternate

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Organization	Representative	
DIA	[ ] Alternate	25X1
Army	Mr. Yaro J. Skalnik Lt. Col. James J. Farrell, Jr., Alt.	
Navy	Capt. Sumner Shapiro Cdr. Donald E. Johnson, Alternate	
Air Force	Mr. William F. Schulze Lt. Col. John A. Rutkowski, Alt.	
AEC	Mr. Kirby A. Gean Dr. Lawrence E. Killion, Alternate	
FBI	Mr. Earl W. McCoy Mr. Paul F. O'Connell, Jr., Alt.	

Observers

NSF (Associate Member)	Dr. Burton W. Adkinson Dr. Harold E. Bamford, Alternate
USSS	Mr. Thomas J. Kelly Mr. Allan B. Sturges, Alternate
DoD/DDR&E	Dr. John F. Egan No Alternate

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During the first six months of FY-70 the following changes took place in the membership. [ ] became the CIA alternate on 8 August 1969. Mr. Skalnik replaced Col. Gordon F. Thomas as Army member on 22 December 1969 and Lt. Col. Farrell replaced Col. Harry N. Roller as the Army alternate on 1 September 1969. Capt. Shapiro replaced Capt. Wendell J. Furnas as Navy member and Cdr. Johnson replaced Capt. James E. Whatton as Navy alternate on 10 October 1969. Col. William E. Naylor, Air Force member, retired on 31 December 1969.

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C. IHC Support Staff.

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_____ as one of the
Support Staff secretaries in November. The remainder of the Staff is
unchanged.

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CHAPTER II

Chapter II, HIGHLIGHTS OF REPORTING PERIOD, has been deleted since the midyear update of the Annual Report is limited to items of significant progress in information handling.

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CHAPTER III

GENERAL

A. Introduction -(No Reported Change).

B. Computing Equipment.

   1. CIA.

Major changes in CIA's Inventory of equipment were:

      (a) July 1969 - Central Reference Service (CRS) installed an IBM 360/50 to replace a 360/40 to handle its document reference system (AEGIS).

      (b) Since July 1969, six additional 2741 communications terminals and eight 2260 display stations have been installed for users of the Office of Computer Services (OCS) Time Sharing System. The total number of user terminals in CIA now exceeds 125.

      (c) A Sanders CRT input/output device for verification, edit and approval of text has been standardized under the Integrated Information System (IIS) by the National Photographic Interpretation Center (NPIC).

   2. DoD Intelligence Data Handling System - (No Reported Change).

   3. Navy - (No Reported Change).

   4. Agency for International Development (AID) - (No Reported Change).

C. Software.

   1. Query and Update Language (QUL) - (No Reported Change).

2. Special Customer Oriented Language (SPECOL).

SPECOL is a simple, natural programming language for use by non-computer programmers for retrieving data from modular structured machine files. The SPECOL system can now process up to ten queries in one data pass. This capability has been built into a MULTI-SPECOL which will be introduced during the last half of FY-70. Approximately 30 major intelligence research files can now be queried via SPECOL. SPECOL has been provided to the Department of Justice and six state law enforcement agencies concerned with massive files on organized crime. In addition, SPECOL has been incorporated as the Organized Crime and Racketeering Intelligence Language (CORIL).

3. Machine-Independent Data Management System.

DIA's Machine-Independent Data Management System is being written in COBOL and is scheduled to be available to the IDHS community in the first quarter of CY-71.

4. CAPRI (No Reported Change).

5. Machine Translation (SYSTRAN).

The objective of this project is the development of an advanced Russian-English machine translation system to provide a replacement for Mark II at FTD (AFSC). Lexicographic support to this effort is provided under a separate contract with LATSEC Inc.

The first output responsive to contractual requirements, i. e., reflecting a capability for work order rearrangement, insertions/deletions, and multiple meaning resolution, is expected in March 1970.

6. Time-Sharing Monitor (TSMON) -(No Reported Change).

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The Office of Computer Services (OCS) implemented the Control Program/ [   ] CP/CMS) on the IBM 360/67 Time Sharing (TS) System with modifications to support IBM 2260 display and 2741 communication terminals. A Programming Language (APL) designed for interactive use under CP/CMS was also implemented by OCS.

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8. Foreign Affairs Data Processing Center - (Not Previously Reported).

A study of the feasibility of establishing a Foreign Affairs Data Processing Center has been launched by the Department of State and AID. The study, which is being conducted under the Department's leadership and with the participation of USIA, ACDA, and the Peace Corps as well as AID, will be completed by the end of 1970.

D. Communications.

    1. DoD/IDHS Communications Network (IDHSC) - (No Reported Change).

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    2. [   ]

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    The IHC, in its Inventory of Community Information Handling Systems (CIHS), concluded that [   ] should satisfy the requirement for secure data communications of intelligence activities in the Washington area, and recommended [   ] as the communication network for an improved CIHS.

    3. CRITICOMM Network - (No Reported Change).

    4. Naval Investigative Service (NIS) Communications.

    During 1969, NIS headquarters inaugurated on-line operations with the National Crime Information Center (NCIC) computer operated by the FBI. An ASR 35 terminal at NIS headquarters is linked to the NCIC via a direct access teletype line. NIS entries to this computer include stolen and recovered guns, serialized equipment, vehicle, license plates and securities. In November 1969 the office of the Chief of Navy Personnel acquired an AUTOVON terminal which transmits NCIC entries on deserters to NIS headquarters, which in turn retransmits this information to the NCIC computer. A new data terminal was installed in December 1969 at NIS headquarters as part of the extensive Federal Bureau of Investigation's Secure Teletype Network. The network is used to pass intelligence information from FBI (and White House, State Department, DIA, CIA) to their users such as NIS.

    5. Washington Area High Speed Facsimile Network (WASHFAX).

    Expansion of WASHFAX is now expected to be completed in FY-71 vice FY-70. The National Communications System (NCS) has accepted the offer of the Department of State 758C switch.

    6. Department of State Secure Voice System.

    The AUTOVON circuit through Monrovia, Maryland was dropped and the AUTOVON circuit to Feldberg, Germany was reterminated on Schoenfeld, Germany. The Department of State provided secure voice

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service during the SALT I talks at Helsinki, Finland. Secure voice service planning is now underway for the SALT II talks.

7. Bonn Automated Exchange (BAX).

Due to technical difficulties this computer program will not be shipped to the American Embassy in Bonn until March 1970.

8. Zone of Interior Consumers Network (ZICON).

The Department of State Zone of the Interior Consumers Network ZICON) is now operating satisfactorily.

9. COMPASS Link (CL).

The USS Arlington was recently deactivated and its COMPASS Link equipment was placed in storage awaiting relocation. A plan is being developed within DoD to extend the COMPASS Link system worldwide.

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E.   Plotter/Display.

1.   IDHS Plotter Display System (PDS).

DIA Instruction 65-11, 2 October 1969, formalized the Navy (NIPSSA) as Executive Agent responsible for management and future development/maintenance of the IDHS/PDS. The instruction also established a Users' Group to provide mutual support and coordination; and set forth functional responsibilities, procedures and formats.

Current PDS programs written in the original IBM 1410 AUTOCODER source language, are being executed on 1410 computers or by emulation on third generation hardware. The latest IDHS/PDS Change, Level 7, was disseminated in December 1969 to world-wide PDS users along with the IDHS Plotter Display System Status Report Number One. USA Standards Institute (USASI) FORTRAN common source language was selected in August 1969 as the most suitable language for the future PDS. The task of converting, rewriting, and documenting the PDS programs into USASI FORTRAN for use on third generation computers was partially completed by the end of CY 1969.

    2. Photo Coverage Processing - (No Reported Change).

F. Other.

    1. ASPIN - (No Reported Change).

    2. Joint Reporting Structure (JRS) - (No Reported Change).

    3. Automated Intelligence Report Evaluation System (AIRES) - (No Reported Change).

    4. Systems Developments for the Agency for International Development (AID) - (No Reported Change).

CHAPTER IV

INFORMATION EXCHANGE

A. Standards.

    1. Data Standardization.

       In the geopolitical area there are now approved DoD standard data elements for the following: continents, counties of the United States, countries of the World, states of the United States, and water areas. The new data elements for "Countries of the World", which is identical with the Country Code Task Group's proposed Federal General Standard on Countries, superseded the former DIA standard "Geopolitical Areas" and is scheduled for implementation during the fourth quarter of FY-70.

       A proposed system for the expression of all geopolitical data requirements is being coordinated with DoD components and IDHS points of contact. It includes the following data elements:

    Celestial Bodies of the Solar System
    Continents/Oceans of the World
    Water Bodies of the World
    States and/or Provinces of Countries of the World
    Counties and/or Districts of States or Provinces of Countries
        of the World
    Places and/or Subplaces of States or Provinces of Countries
        of the World
    Terrestrial Hemisphere
    Areas of the World
    Regions of the World

       In the intelligence data area the following data elements and data chains have been approved as DoD standards:

    Cartographic Event
    Cartographic Grid
    Cartographic Scale
    Decisecond (Angular)
    Edition Serial Number

Edition Status
Horizontal Control Datum Name
Latitude, Degrees
Longitude, Degrees
Millisecond (Angular)
Minute (Angular)
Second (Angular)
Sounding Datum
Vertical Control Datum Name
Complete Date, Cartographic Event
Edition Designator

Manuals have been published listing interim IDHS standards for mapping, charting, and geodesy and for imagery reporting systems. Draft manuals for ports and naval installations and for order-of-battle data have been produced. Data standards are being developed for collection and dissemination systems, coast and landing beach intelligence, military biographics, and order-of-battle data.

2. Tape Exchange - (No Reported Change).

3. COMIREX Data Base Working Group (DBWG) - (No Reported Change).

4. Country Code Task Group (CCTG) - (No Reported Change).

5. Common Data Processing Standards for State/AID - (No Reported Change).

B. Data Exchange.

1. National Base of Imagery Derived Information (NBIDI) - (No Reported Change).

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3. Soviet Military R&D Data Exchange - (No Reported Change).

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5. Central Information Reference and Control On-Line (CIRCOL) - (No Reported Change).

6. NSA/Defense Documentation Center Link -(No Reported Change).

7. CIA/National Agency Check Link - (No Reported Change).

8. Bibliographic Data from FTD - (Not Previously Reported).

The Central Reference Service (CRS) has arranged to obtain and process bibliographic data on USSR publications produced on magnetic tape by Foreign Technology Division (FTD) at Wright-Patterson Air Force Base. CRS previously obtained bibliographic references from FTD on 5x8 cards. The data base now contains approximately three million items with a growth rate of ten thousand items per month.
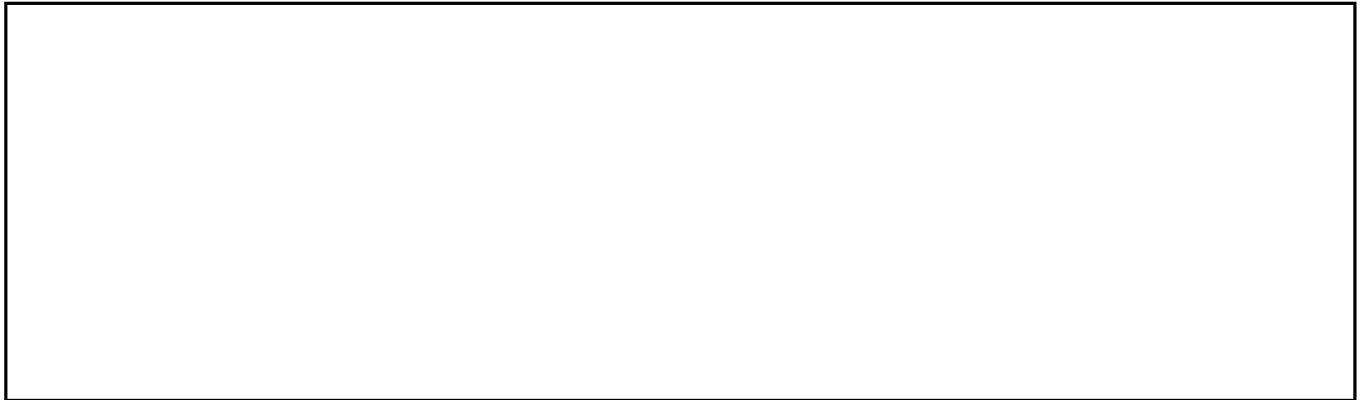
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CHAPTER V

RESEARCH AND DEVELOPMENT

A. Processing Techniques.

 1. Introduction - (No Reported Change).

 2. Report of Progress and Activities in FY-70 - (First Six Months).

   (a) Chemical Information and Data System (CIDS) -
        (No Reported Change).

   (b) Content Analysis Techniques Investigation and
        Optimization - (No Reported Change).

   (c) Human Readable/Machine Readable Mass Memory Subsystem
        (HRMR) - (No Reported Change).

   (d) Fingerprint Searching - (No Reported Change).

   (e) Interactive Text Processing - (No Reported Change).

   (f) On-Line Text Editing - (No Reported Change).

   (g) FBIS Data Processing - (No Reported Change).

   (h) Text Processing and Optical Character Reader Evaluation.

        In FY-70, an experimental Optical Character Reader (OCR)
   system will be built and experiments will be conducted in-house at
   Rome Air Development Center (RADC) to optimize the recognition
   logic and determine accuracy, throughput rate, and costs of device.
   The initial application will be in a large Air Force programming
   installation to be identified by AFADA, for the purpose of reading
   programming coding sheets.

        DIA has suspended work on its system for automatic indexing
   of the Intelligence Information Reports (IIRs). The lease for the
   Philco-Ford Optical Character Reader has expired and the equipment
   has been returned to the manufacturer. A report on the results of
   this project is being prepared.

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(i) [ ]

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    Additional terminal capabilities were introduced into the [ ] facility. The hardware has been expanded to support 20 IBM 2741 remote terminals. Two full interactive graphics terminals and supporting software became available for general usage.

    (j) IHC Research and Development Subcommittee - (Not Previously Reported).

    At the request of the IHC, the Research and Development Subcommittee is working on a plan for an intelligence community institute for research and development in information handling.

B. Speech and Analog Processing.

    1. Introduction - (No Reported Change).

    2. Report of Progress and Activities in FY-70 - (First Six Months).

        (a) Speech Processing - (No Reported Change).

        (b) Analog Speech Synthesizer - (No Reported Change).

        (c) Signal Analysis System - (No Reported Change).

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        (d) [ ] (No Reported Change).

C. Storage and File Management.

    1. Introduction - (No Reported Change).

    2. Report of Progress and Activities in FY-70 - (First Six Months).

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        (a) [ ] (No Reported Change).

        (b) High-Density Digital Storage - (No Reported Change).

        (c) Associative Processing Development - (No Reported Change).

        (d) Engineering Data Storage Retrieval (EDSR) - (No Reported Change).

        (e) Technical Information Support Activities (TISA) - (No Reported Change).

D. Computer Networks.

1. Introduction - (No Reported Change).

2. Report of Progress and Activities in FY-70.- (First Six Months).

(a) Information and Data Exchange Experimental Activities (IDEEA) - (No Reported Change).

E. Graphic and Photographic.

1. Introduction - (No Reported Change).

2. Report of Progress and Activities in FY-70- (First Six Months).

(a) Automated Wall Display System - (No Reported Change).

(b) Advanced Cartographic System (ACS) - (No Reported Change).

(c) Graphic Application Language (GAL).

CIA's Graphic Application Language (GAL) has been debugged and is being used. The language is designed to provide a degree of device independence to the programmer and to provide a common ground for display generation.

(d) Interactive Chinese-English Translation Aid.

The prototype computer-based Chinese-to-English translation system at CIA has been extended to provide display of Chinese ideographs on an IBM 2250 console, enabling a translator to verify that he has entered the right characters. Other additions to the system include: the ability to call up on the display sets of characters based on Romanized spelling or partial telegraphic code numbers; and the ability to insert English meanings on-line while the dictionary is being used. The dictionary data base has now been expanded to a total of about 230,000 entries.   25X1

(e) Graphic Display System [ ] - (No Reported Change).

(f) Laser Image Processing Scanner (LIPS) - (No Reported Change).

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F. Summary - (No Reported Change).

CHAPTER VI

INFORMATION STORAGE, RETRIEVAL, AND/OR DISSEMINATION

A. Data Base Development.

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1. [   ] (No Reported Change).

2. Automated Installation Intelligence File (AIF).

AIF now contains over 304,000 records of installations worldwide and is stored on 18 magnetic tapes at DIA.

3. Defense Intelligence Order of Battle System (DIOBS).

The Defense Intelligence Order of Battle System will reach its initial operational capability in May 1970 and first outputs to the U&S commands are scheduled to be dispatched on 15 July 1970. The DIOBS file, estimated at 60,000 to 70,000 records, will use the GE-635.

4. Worldwide Automated Biographic Data System (WWBIO).

DIA now has some 42,000 automated records of foreign personalities, mostly military, in the WWBIO and the file is expected to grow to about 120,000 records by mid-1970.

5. Automated System for Transportation Intelligence (ASTI).

DIA began testing of the rail mode in August 1969, and a fully operational batch capability on the IBM 360/65 is planned for mid-1970. Actions necessary to implement the ASTI on the GE-635 vice the IBM 360/65 for both on-line and off-line operations are now being investigated.

6. SIGINT On-Line Information System (SOLIS).

In August 1969, approval was given to utilize a Burroughs 500 system as an outstation of the B6500 for the purposes of testing the SOLIS storage and retrieval system. Although the testing will be done on the NSA Burroughs system, the software is being written in a compiler language and will be applicable to any third-generation time-sharing multi-access computer system.

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7. <u>Economic Applications</u> - (No Reported Change).

8. [   ] (No Reported Change).   25X1

9. <u>Current Intelligence Support</u> - (No Reported Change).

10. <u>ELINT Collection Requirements and Capabilities Data System</u> - (No Reported Change).

11. <u>Trade Policy Analysis System.</u>

    The operational test period for the Trade Policy Analysis System has been extended for a number of months.   25X1

[   ]

13. <u>Foreign Policy Statements File</u> - (No Reported Change).

14. <u>UN Voting Records</u> - (No Reported Change).

15. <u>Latin American Country Economic Data System</u> - (No Reported Change).

16. <u>Script Usage Reporting System for USIA</u> - (No Reported Change).

B. <u>Systems Having a Management Emphasis</u>.

1. Target Oriented Display System (TOD) - (No Reported Change).

2. Area Requirements and Product Status File (ARAPS).   25X1

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3. <u>System for Processing Engineering Data (SPED)</u> - (No Reported Change).

4. Naval Investigative Service (NIS) Personnel Management System - (No Reported Change).

5. Control System for Current Economic Reporting Program (CERP) (No Reported Change).

6. Technical Information Functions and Activities (TIFA) - (No Reported Change).

C. <u>Dissemination</u>.

1. <u>Intelligence Dissemination Support System (IDSS)</u> - (No Reported Change).

2. <u>Automated Dissemination</u>.

CRS purchased text processing software from Bunker Ramo Corporation which it used in making extensive tests of the feasibility of performing machine-assisted dissemination of teletype messages.

3. <u>Automated Terminal Station (ATS)</u>.

The Automated Terminal Station of the Department of State has added a high speed (2400 bit) circuit to the Department of the Army's Communication Center, Pentagon. The ATS has increased its core size and drum capacity to improve the system operation.

D. <u>Document Imagery/Representation</u>.

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1. <u>MINICARD System</u>.

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2. Foreign Missile and Space Analysis Center (FMSAC) -
   (No Reported Change).

3. Security Automated Name Check Activity (SANCA) -
   (No Reported Change).

4. Program Assisted Console Evaluation and Review System
   (PACER).

A successful test and preliminary evaluation of the experimental
PACER pilot system at the Strategic Air Command (SAC) was conducted
during the second quarter of FY-70. Results of this test are currently
being compiled for detailed analysis. During the latter part of FY-70
the GE-635 memory and mass storage will be increased and an additional
seven BR-90 consoles and 24 textual consoles will be added to the system.

5. Central Information Reference and Control On-Line (CIRCOL) -   25X1
   (No Reported Change).

F. Information Storage and Retrieval Systems.

1. CIA/CRS Information Storage and Retrieval System.

AEGIS software was modified by the Programmatics Corp. to provide a significant increase in batch querying speed for the CRS document retrieval system. Considerable in-house effort was also devoted to AEGIS modifications. A program to update fixed fields in the subject record permits faster maintenance than was possible with the contractor package. Other modifications include input validity checks on fixed fields and on subject and area periodic fields, improved error correction procedures, and a special list format to produce magnetic tape input to the Stromberg Carlson Datagraphic 4360 Micromation Printer.

2. Photo Reconnaissance and Exploitation Management Support System (PREMSS).

The redesigned AMPHI is now scheduled for retrieval operations on the IBM 360/50 disk system in February 1970. This will provide direct access to the index of worldwide aerial photographic coverage maintained by the DIA Photo Library.

3. NPIC's Integrated Information System (IIS) - (No Reported Change).

4. National Crime Information Center (NCIC) - (No Reported Change).

5. Foreign Technology Information System (AFSC/FTIS) -
      (No Reported Change).

6. Written Word Information Handling System (WWIHS) -
      (No Reported Change).

7. Department of State Substantive Information System (SNS).

For FY-70, SNS was authorized an increase in its staff from 21 to 39 people; however, only a few of the new positions have been filled.

Work has continued on the thesaurus and SNS has now assembled a list of 52,000 raw terms. It is estimated that the official thesaurus will contain about 12,000 of these terms.

SNS is experimenting with an automated index model to determine if automated indexing is feasible.

In November 1968 INR, in conjunction with OM/SNS, initiated a series of case studies on how intelligence analysts obtain information for analytical purposes and how such information is used in the process of preparing research studies. Analysts representing each of the regional research offices of INR on the INR Information Handling Committee were required to write out approximately 20 illustrative information handling cases which cited examples from recent work experience which illustrated important uses of information. This program was concluded in January 1969 and then submitted to OM/SNS, for analysis and critique.

The experience gained by the INR case studies made clear that a more refined questionnaire and study was needed to give a clearer picture of total INR information requirements. Subsequently, OM/SNS developed a plan of action and procedure for (a) determining requirements for information and data files for INR as well as the Department, and (b) conducting surveys and studies to determine the existence of files or other resources which might, if available, satisfy these requirements in whole or in part. The plan of action recognizes a relationship between user requirements for information and data files and their higher priority requirements for information data itself. The action plan calls for interviews with desk officers and analysts throughout INR, to determine its information needs. The interview survey is scheduled for the first two weeks in February 1970 and will require each analyst interviewed to list and rank in order of importance the tasks he is called upon to perform. He will be asked to state what he finds useful or less useful about the information and files that are available to support these tasks and he will be asked to suggest any improvements.

In addition, INR will be requested to assist in describing information and data files and special documents located in the Bureau. The objective of this survey will be (a) to relate ongoing requirements to the existing files and (b) to determine if appropriate existing files, regardless of present location, can be adopted or adapted to satisfy requirements rather than immediately engaging in costly design and development of entirely new and possibly duplicative files.

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G. Other Developmental Activities.

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2. Rapid Search Machine.

CIA replaced RSM I with the RSM II in November 1969. The RSM II searches unformatted, free-text files and formatted files at 120,000 characters per second. It uses a CRT for input of queries against the file, a 400 character per second electrostatic line printer for output and can print from 8 to 990 characters around the hit words and phrases. Currently there are twelve files running on the RSM II.

3. Magnetic Tape Selectric Typewriter Applications (MT/ST) - (No Reported Change).

CHAPTER VII

PRELIMINARY PLAN TO IMPROVE THE COMMUNITY
INFORMATION HANDLING SYSTEM (CIHS)

A. Inventory of Community Information Handling Systems.

1. Under the Preliminary Plan to improve the Community Information Handling System, Subplan III, a report on the 45 systems nominated by IHC members was prepared for submission to IHC. In the report the systems were grouped into categories on the basis of the intelligence functions they support, the information handling techniques they employ, or the kind of substantive data handled in them.

2. The 45 systems were assigned to categories as follows:

Category		No. of Systems
I	Data Communications Systems	3
II	Control Programs	1
III	Data Management Systems	3
IV	Information Storage and Retrieval Systems	
	A. Imagery Analysis Support Systems	3
	C. Installation/Transportation Systems	4
	D. Order of Battle Systems	1
	E. Policy Information Systems	1
	F. Source Oriented Systems	1
V	Management Information Systems	4
VI	Document Storage and Retrieval Systems	7
VII	Text Processing Systems	4
VIII	Graphic Display Systems	2
IX	Models	3
X	Computational Support to R&D	1
XI	Training Facilities	1
		45

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Each category is described in the report and related systems in other categories are identified. Review of the systems in the individual categories shows that in only one, Data Communication Systems, is it possible to recommend that a system be considered for selection as a CIHS component. In all the other categories the systems nominated fail to reflect adequately the requirements and capabilities of the community. The three recommendations of the Inventory Report are:

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" (a) The IHC Support Staff develop procedures for the inventory which will provide a comprehensive list of system categories, guidance for the nomination of systems for the inventory, identification of data elements for each category of systems, and a schedule for the nomination and inventory of systems and the analysis and publication of data;

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(b) [   ] be considered for selection as the central communication network for an improved CIHS and the IDHSC be examined for its ability to interface with [   ] and   25X1

(c) The R&D Subcommittee be directed to review Data Management Systems in use or under development in the community; assess their relative value in satisfying community requirements; and prepare a plan for Data Management System development to satisfy community needs. "

S-E-C-R-E-T

CHAPTER VIII

EDUCATION AND TRAINING

A. Summary.

    1. Training Trends - (No Reported Change).

    2. Hiring of Experienced Personnel - (No Reported Change).

    3. Full-Time University Training - (No Reported Change).

    4. DoD IDHS Environmental Training Facility.

        The Armed Forces Air Intelligence Training Center (AFAITC) at Lowry Air Force Base, Colorado, has established an Intelligence Information Handling System Environmental Training Facility. An IBM 360/40 computer was installed in the AFAITC facility in November 1969. All students of the AFAITC will now receive training in the practical application of data automation to Air Intelligence problems by employing the IBM 360/40.

B. Information Science Center (ISC).

        The Information Science Center has had four (4) additional professional personnel assigned to it by DIA. The total personnel assigned at this time is 11 (7 professional and 4 academic support personnel). This completes the currently authorized manning of the Center. The first pilot course (Information Science in Support of Intelligence Functions) to be offered by the ISC will start on 2 February 1970. The class will consist of 20 members made up from all USIB member organizations plus the four military services.

C. Annex B (Education and Training) to the Second Annual IHC Report.

        Annex B (Education and Training) was distributed by USIB-D-71. 6/3 and by an IHC memorandum on 16 January 1970.

D. <u>Multi-Level Security Computer System Training</u> - (Not Previously Reported).

On 29 November 1969, a JCS Memorandum (SM-815-69 was issued. It requires the military services to review and modify, or augment, as deemed necessary, the automatic data processing training received by security specialists and security training received by automatic processing specialists who will participate in the designing, testing, evaluating, and certifying of secure multi-level computer systems.

E. <u>COINS Training</u> - (Not Previously Reported).

Toward the end of the Report period, sufficient improvements were made to allow some user training. However, since the test and analysis period had begun, a decision was made to establish one or two families of users at each agency who could and would make regular operational use of at least one file at one of the other agencies. This plan required no formal classroom training. An "on-the-job" training approach was used.

In addition to several training documents that have been published, the COINS Training Panel has scheduled seminars on specific COINS files. The first was held at DIA in September on NSA Field Post Number files.

NSA published a training manual on a new query language called TILE (TIPS Interrogation Language) in July 1969.

CHAPTER IX

NATIONAL INDICATIONS CENTER

A. National Indications Center (NIC).

    1. Significant Developments - (No Reported Change).

    2. General Indicator List - (No Reported Change).

    3. Department of State Cables - (No Reported Change).

    4. Information Handling by Special Security Office (SSO) -
       (No Reported Change).

25X1   B. [   ] Project - (No Reported Change).

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CHAPTER X

SECURITY IN INFORMATION HANDLING SYSTEMS

A. Introduction - (No Reported Change).

B. Report of Progress and Activities.

    1. CIA Computer Center - (No Reported Change).

    2. Computer Security R&D - (No Reported Change).

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    4. Security Guidelines and Policy in Information Handling Systems.

          As part of the continuing evaluation of security controls in the System Development Corporation's ADEPT system, a study of the IBM 360/50 hardware was conducted. The study was to determine if there were cases in which the failure of a single component could nullify the security controls. Several such cases were found in which the failure would not normally be detected. It was also determined that additional software can be incorporated into ADEPT to detect these specific cases.

C. Participation in Work of the Defense Science Board Task Force on Computer Security - (No Reported Change).

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CHAPTER XI

INFORMATION HANDLING UNDER CONDITIONS OF GENERAL WAR

A. CIA - (No Reported Change).

B. DIA - (No Reported Change).

C. NSA - (No Reported Change).

D. Department of State - (No Reported Change).

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